

JAN/FY06

CAMP GRAYLING
Michigan

**Army Defense Environmental
Restoration Program
Installation Action Plan**

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The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Installation Cleanup Program for an installation. The plan will identify environmental cleanup requirements at each site or area of concern, and propose a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the US Army Environmental Center (USAEC), Camp Grayling, the National Guard Bureau (NGB), an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this 2006 Installation Action Plan for Camp Grayling:

Company/Installation/Branch

Camp Grayling/Michigan Army National Guard

EEI for USAEC

ICI, Ilc for USAEC

AEDB-R	Army Environmental Database - Restoration
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CGTS	Camp Grayling (as designated in AEDB-R)
DD	Decision Document
DERA	Defense Environmental Restoration Account (currently called ER,A)
ER,A	Environmental Restoration, Army (formerly called DERA)
FS	Feasibility Study
FY	Fiscal Year
GAC	Granular Activated Carbon
GW	Groundwater
IAP	Installation Action Plan
IRA	Interim Remedial Action
IRP	Installation Restoration Program
JP-4	Jet Propellant Number Eight
LTM	Long Term Management
MATES	Mobilization and Training Equipment Sites
MC	Munition Constituents
MDNR	Michigan Department of Natural Resources
Mg/l	micrograms per liter
MIARNG	Michigan Army National Guard
MMRP	Military Munitions Response Program
NGB	National Guard Bureau
NPL	National Priorities List
OE	Ordnance and Explosives
OMS	Organizational Maintenance Shop
PA	Preliminary Assessment
PCE	Tetrachloroethylene
RA	Remedial Action
RAB	Restoration Advisory Board
RAC	Risk Assessment Code
RC	Response Complete
REM	Removal
RI	Remedial Investigation
ROD	Record of Decision
SI	Site Inspection
TAPP	Technical Assistants for Public Participation
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons
TRC	Technical Review Committee
USAEC	United States Army Environmental Center
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
UXO	Unexploded Ordnance

Installation Locale: Camp Grayling is located approximately 140 miles north of the state capital of Lansing, and adjacent to the city of Grayling in central Michigan. The area surrounding Camp Grayling consists primarily of residential and recreational areas and state-owned forest land. The City of Grayling covers an area of approximately one square mile and contains minor commercial and industrial areas.

The Federally-owned Michigan Army National Guard (MIARNG) portion of the camp is located in Crawford County. The US Geological Survey (USGS) coordinates of the center of the Federally-owned portion are 44 degrees, 40 minutes, 49 seconds North latitude and 84 degrees, 43 minutes, 45.0 seconds West longitude. The Federally-owned portion is located in the central area of the camp and consists of the Grayling Army Airfield with the associated operations area, and a bulk fuel facility. Camp Grayling encompasses 147,859 acres, of which 105,383 are owned or leased on a long-term basis by the Michigan Department of Military Affairs.

Installation Mission: MIARNG's mission is to provide units/personnel to the state and nation for national defense, civil defense and disaster relief.

Command Organization:

Major Command: National Guard Bureau (NGB)

Installation: Michigan Army National Guard, Camp Grayling Site

Lead Executing Agencies:

US Army Environmental Center, US Army Corps of Engineers

Regulatory Participation:

Federal: US Environmental Protection Agency (USEPA), Region V, Emergency Response

State: Michigan Department of Natural Resources (MDNR)/Michigan Department of Environmental Quality

National Priorities List (NPL) Status: Non-NPL.

Restoration Advisory Board (RAB)/ Technical Review Committee (TRC)/ Technical Assistants for Public Participation (TAPP) Status: None. There is an informal community council meeting held on an annual basis to update interested parties on site cleanup status.

Installation Program Summaries

IRP

All IRP sites are response complete (1997)

MMRP

Contaminants of Concern: Lead

Media of Concern: Soil

Estimated date for Response Complete (RC): 2015

Funding to Date: (up to FY05): \$25,000

Current year funding (FY06): \$0

Cost-To-Complete (2007+): \$1,372,000

Historic Activity

Areas of private property, totaling 20,150 acres, are located within or adjacent to Camp Grayling. The camp is divided into four general areas, North Camp training areas, South Camp training areas, the Cantonment Area, and the Grayling Army Airfield areas. The Federally-owned MIARNG portion, which consists of the Grayling Army Airfield, the airfield operations area, and the bulk fuel facility, encompasses approximately 836 acres. The Grayling Army Airfield is operated by the MIARNG and is used primarily for Army helicopter operations, but the runways can also accommodate fixed-wing aircraft such as military C-130 Hercules cargo airplanes. The airfield control tower, an operations building, crash and rescue equipment, and temporary housing units are located in the airfield operations area. The bulk fuel facility functions as a storage and dispensing area for diesel fuel, JP-4 aviation fuel, and unleaded gasoline. The Camp Grayling Mobilization and Training Equipment Site (MATES), which was established in 1962, were also located in this area until October 1987 when a new MATES facility was built in the North Camp training area. The buildings formerly occupied by the MATES facility are currently unoccupied. Building 1100, which was formerly used as an Organization Maintenance Shop (OMS) is currently unoccupied.

A spill from the diesel bulk fuel storage tank was discovered in 1984. Contaminated soil was excavated and disposed of. Groundwater sampling indicated TPH contamination. A groundwater treatment system using carbon adsorption filters was installed in 1984, using surficial pumping of contaminated groundwater from an excavated recovery pit. The system was converted to a bioremediation system in 1989, given the success of bioremediation on the known contaminant (diesel). In 1992, when testing by the MDNR indicated the presence of tetrachloroethylene (PCE), an aqueous-phase granule, activated carbon system was installed.

The Preliminary Assessment for the Airfield was completed in June 1994. A total of seven environmentally sensitive sites were identified by the Preliminary Assessment (PA).

Current Activity: The Bulk Fuel Facility now consists of one 30,000 gallon JP-4 Aviation fuel aboveground storage tank. Other tanks have been removed.

The former tenant, Kirtland Aviation, no longer occupies the site. The new tenant is the Armory Headquarters for the 507th Engineer Unit, which is located in several buildings south of the airfield operations area.

A carbon adsorption groundwater cleanup system still operates onsite.

IRP

All IRP sites are response complete (1997)

MMRP

Progress in FY05: None

Future Plan of Action for next two years: The installation plans to complete the Site Inspection (SI) by 2008 and execute follow on phases/actions as required in the site cleanup strategy.

CAMP GRAYLING

Military Munitions Response Program

MMRP Summary

Total Army Environmental Database-Restoration (AEDB-R) MMRP Sites/AEDB-R MMRP Sites with RC: 1/0

AEDB-R Site Types: 1 Small Arms Range

Contaminants of Concern: Lead

Media of Concern: Soil

Completed REM/IRA/RA: No RAs have been completed at the MMRP sites.

Funding:

Prior years (up to FY05):	\$ 25,000
Current Year (FY06):.....	\$ 0
Future Requirements (FY07+):	<u>\$. \$1,372,000</u>
Total:	\$1,397,000

Duration of MMRP:

Year of MMRP Inception: 2002
Year of MMRP RC: 2015
Year of MMRP Completion Including LTM: 2015

MMRP Contamination Assessment

The Phase 3 Army Range Inventory was completed at Camp Grayling AAP in Dec 03. The inventory identified one site as eligible for the MMRP, the Rifle Range. The Phase 3 Inventory serves as the Preliminary Assessment under CERCLA. A Site Inspection is scheduled in FY08.

MMRP Cleanup Exit Strategy

The installation plans to complete the SI by 2008 and execute follow on phases/actions as required in the site cleanup strategy.

Previous Studies

2002

- Closed, Transferring and Transferred Range/Site Inventory Report, Camp Grayling, MI, Army National Guard, US Army Corps of Engineers, December 2002

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Military Munitions Response Program Site Description

CGMTC-001-R-01

Rifle Range

SITE DESCRIPTION

This 192.59 acre former rifle range was constructed in 1914 and used through 1948 for training of MIARNG Units. This site was located on the western edge of the cantonment area south of Lake Margrethe. The specific munitions types used in the rifles are not known. When the cantonment area was expanded in 1948, the 600 area buildings were constructed over this former range. No UXO is known to have been found during construction. This area is still used for cantonment. The direction of fire on the rifle range was from south to north. The range fan overlaps portions of the current operational property, and therefore only the portion of the rifle range and range fan that falls outside operational property is included in this site.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: Negligible Risk

CONTAMINANTS OF CONCERN:
Lead

MEDIA OF CONCERN: Soil

PHASES	Start	End
PA.....	200207	200305
SI.....	200610	200809
RI/FS	201410	201509

RC: 201509

CLEANUP STRATEGY

An installation-wide Archive Search Report and a Site Inspection (SI) will be completed to determine if further action is needed. Currently, the following phases are scheduled to be completed:

- RI/FS to include the installation of groundwater monitoring wells
- RD/RA for the excavation and disposal of contaminated soils

Upon completion of the SI, it will be determined if the RI/FS and RD/RA will be necessary.

MMRP Schedule

Initiation of MMRP: 2002

Past Phase Completion Milestones

2003

- PA Completion

Projected ROD/DD Approval Dates: None

Projected Construction Completion: N/A

Schedule for Five Year Reviews: TBD

Estimated Completion Date of MMRP including LTM: 2015

Camp Grayling MMRP Schedule

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
CGMTC-001-R-01	SI									
	RI/FS									201509

MMRP Costs

Prior Years Funds

Year	Site Information	Expenditures	FY Total
FY 03	PA	\$25 K\$25 K

Total Funding up to FY05: \$25 K

Current Year Funds

Year	Site Information	Expenditures	FY Total
FY 06	\$0 K\$0 K

Total Funding FY06: \$0 K

Total Future Requirements: \$1,372 K

Total Program Cost (from inception to completion of the MMRP): \$1,397 K

Community Involvement

A Camp Grayling Community Relations Plan was implemented in 1996. The Camp Grayling Community Council was formed in 1997 with annual cleanup update meetings held with local citizen groups and concerned citizens. Site information repositories have been established locally. Periodic cleanup project updates and fact sheets have been provided periodically to citizens and local newsgroups. Citizen interest is minimal.